

REMARKS

In the Office Action, claims 1, 3, 5-12, 14, 16-18, 23, and 25-31 were rejected under 35 U.S.C. § 103(a) as being obvious from Zenz (US Pat. No. 5,841,425) in view of Siddiqui et al. (US Pat. No. 6,097,371, hereinafter Siddiqui).

Zenz discloses a mouse and a trackball that include sensors for determining whether the user is holding the mouse or track ball with their left hand or with their right hand. In the mouse embodiment, the sensor is located in the natural gripping position for the user's thumb. Thus, when the user is holding the mouse, their thumb touches the sensor.

Siddiqui discloses a two-button mouse with a depressible wheel. Siddiqui does not show or suggest a thumb button.

The present application includes independent claims 1, 7, 14, 18, and 25. The patentability of each of these claims is discussed separately below.

Independent claim 1 and claims 3, 5, and 6

Independent claim 1 is directed toward a mouse that includes a thumb pinching area located on the side of the mouse near the mouse's bottom surface. The mouse also include two side buttons that are located above the thumb pinching area in a direction away from the mouse's bottom surface.

Neither Zenz nor Siddiqui show such a mouse. In particular, neither reference shows two buttons located above a thumb pinching area.

In the Office Action, it was asserted that buttons 36 and 40 of Zenz are located above a thumb pinching area 64. However, as shown in FIG. 3 of Zenz, thumb pinching area 64 and buttons 36 and 40 are the same distance from the bottom surface of the mouse. As such, buttons 36 and 40 are not above thumb pinching area 64, but instead are level with thumb pinching area 64.

Since neither Zenz nor Siddiqui show a mouse with at least two buttons located above a thumb pinching area, their combination does not render the invention of claim 1 obvious. As such, claim 1 and claims 3, 5, and 6, which depend therefrom, are patentable over the cited art.

Independent claim 7 and claims 8-12

Independent claim 7 has been amended to eliminate a redundant phrase mistakenly added in the preliminary amendment of September 20, 2000. This amendment does not narrow the scope of claim 7 in any manner.

Independent claim 7 is directed toward a mouse with a thumb gripping position and at least one button that is between the user's thumb and the user's index finger when the user's thumb is in the thumb gripping position. The at least one button has a surface that is substantially level with a surface of the thumb gripping position.

Neither Zenz nor Siddiqui show a mouse with such a side button. This can be seen in Fig. 3C of Zenz where it clear that there is no side button between the user's thumb and the user's index finger. Similarly, FIG. 1D of Siddiqui shows that there is no button between the user's thumb and the user's index finger when the user's thumb is in the gripping area.

Because neither Zenz nor Siddiqui show a mouse with a side button located between a thumb gripping area and the user's index finger, their combination does not show or suggest the invention of claim 7. As such, claim 7 and claims 8-12, which depend therefrom, are patentable over Zenz and Siddiqui.

Independent claim 14 and claims 16 and 17

Independent claim 14 provides a mouse with a convex support for the user's ring finger and little finger. In claim 14, the convex support is separate from a secondary button on the mouse.

Neither Zenz nor Siddiqui show a mouse with a convex support for the user's ring finger and little finger. In the Office Action it was asserted that even though these references don't show such a support, it would be obvious to make the mouse wide enough to provide such support. Applicants respectfully dispute this assertion.

First, in Zenz, making the mouse wider would not provide a convex support for the user's ring finger because the mouse is already so wide that all of the user's fingers are on the mouse. This can be seen in FIG. 3D. Thus, simply making the Zenz mouse wider would not provide a convex support for the user's ring finger that was separate from a secondary button. As such, it is not obvious to widen the Zenz mouse.

Second, it is not obvious to widen the Siddiqui mouse because it is not clear what effect such a change would have on the ergonomic characteristics of the mouse. As noted in columns 7 and 8 of Siddiqui, the ergonomic characteristics of the mouse provide several benefits including reducing the likelihood of spastic or uncontrollable muscle contractions. It is not clear from Siddiqui that the mouse could be widened without destroying some of these benefits. As such, those skilled in the art would not be motivated to widen the Siddiqui mouse.

Since the cited references provide no motivation for widening the Zenz or Siddiqui mice, it would not be obvious to widen these mice to provide a convex support for a user's ring finger and little finger as found in claim 14. As such, claim 14 and claims 16 and 17, which depend therefrom, are patentable over the cited art.

Independent Claim 18

With the current amendment, independent claim 18 is amended to include the limitation of claim 23. As such, this amendment should not be viewed as a narrowing of claim 18. Instead, it should be viewed as a rewriting of claim 23 in

independent form. As such, an infringement analysis of the scope of any of the limitations of claim 18 should include a determination of whether an item infringes under the doctrine of equivalents.

As amended, independent claim 18 is similar to claim 14 in that it provides a ring finger contact area and a little finger contact area that are both convex, where the ring finger contact area is separate from a secondary button. As discussed above, providing such contact areas on a mouse is not obvious from Zenz and Siddiqui. As such, claim 18 is patentably distinct from the cited art.

Independent claim 25 and claims 26-31

Independent claim 25 provides a mouse with a wheel having at least fifty ribs. None of the cited references show a mouse with such a wheel. In particular, none of the references show a mouse with at least fifty ribs.

Note that the number of ribs on the wheel of the present invention provides an advantage to the mouse of claim 25.

In particular, it provides increased friction between the user's finger and the wheel thereby making it easier for the user to control the wheel.

None of the cited references discuss ribs on their wheel. As such, none of the references show or suggest the mouse of claim 25. Therefore, claim 25 and claims 26-31, which depend therefrom, are patentable over the cited art.

Conclusion

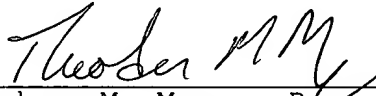
In light of the above remarks, reconsideration and allowance of claims 1, 3, 5-12, 14, 16-18, and 25-31 is respectfully requested.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

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